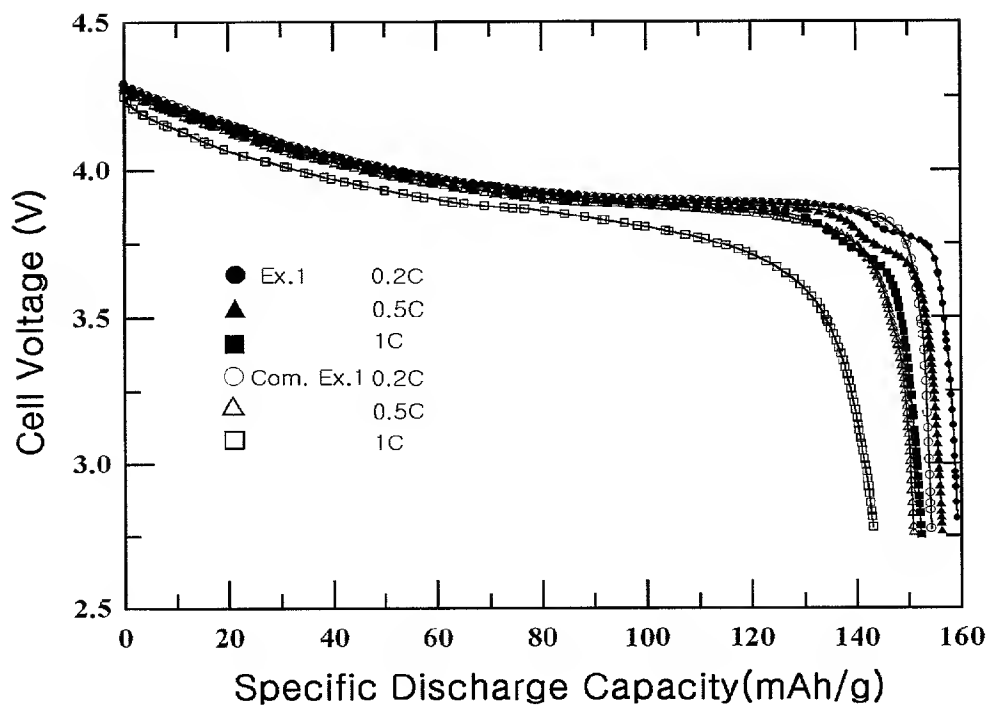
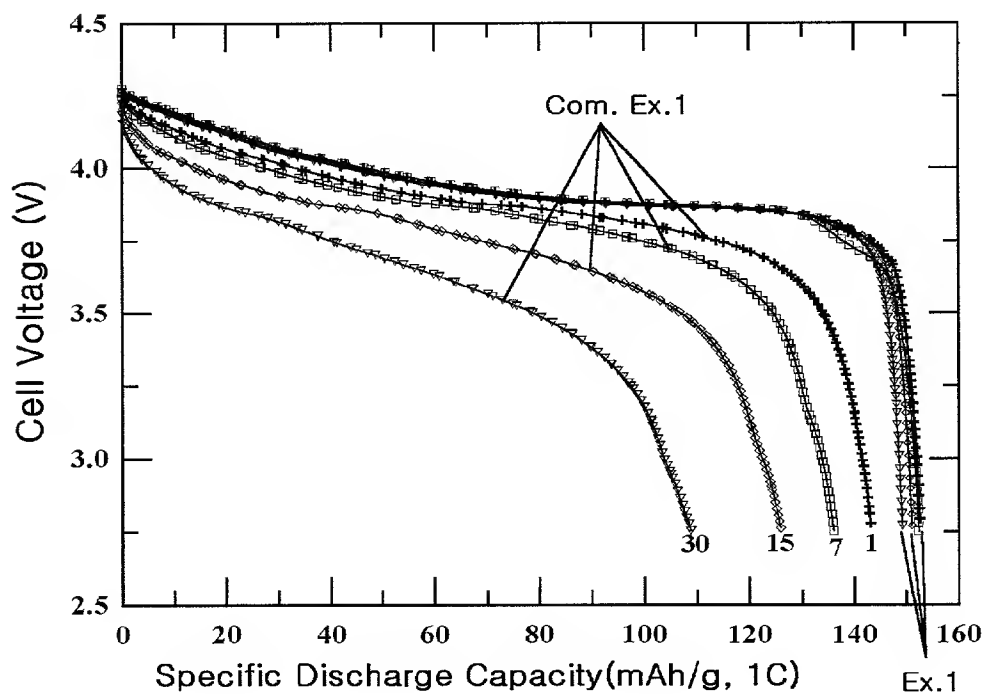


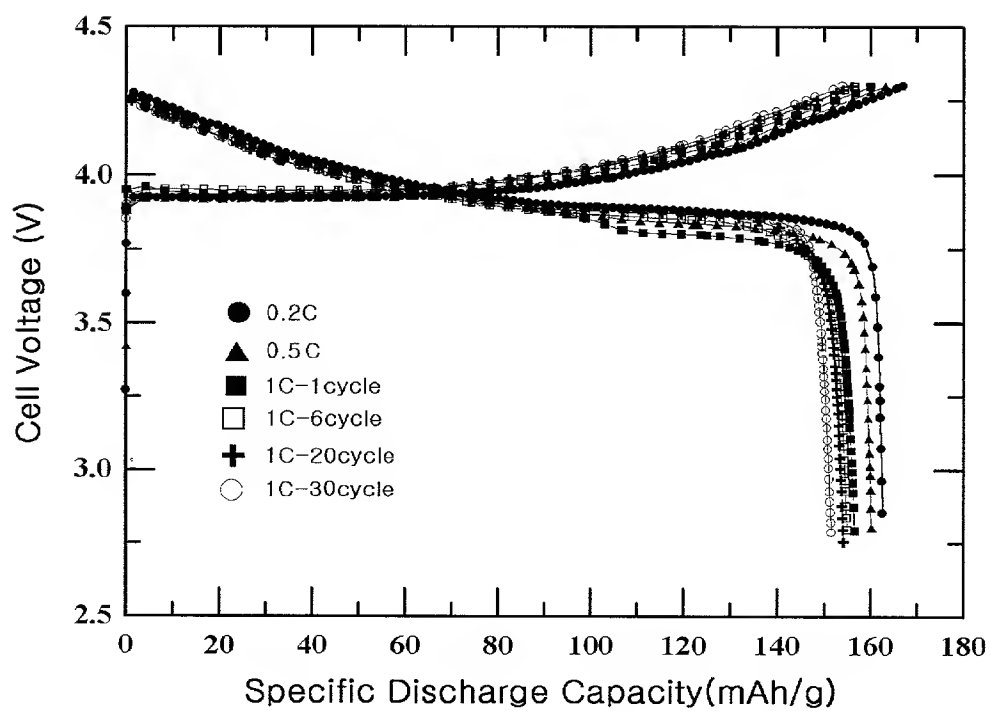
*FIG.1*



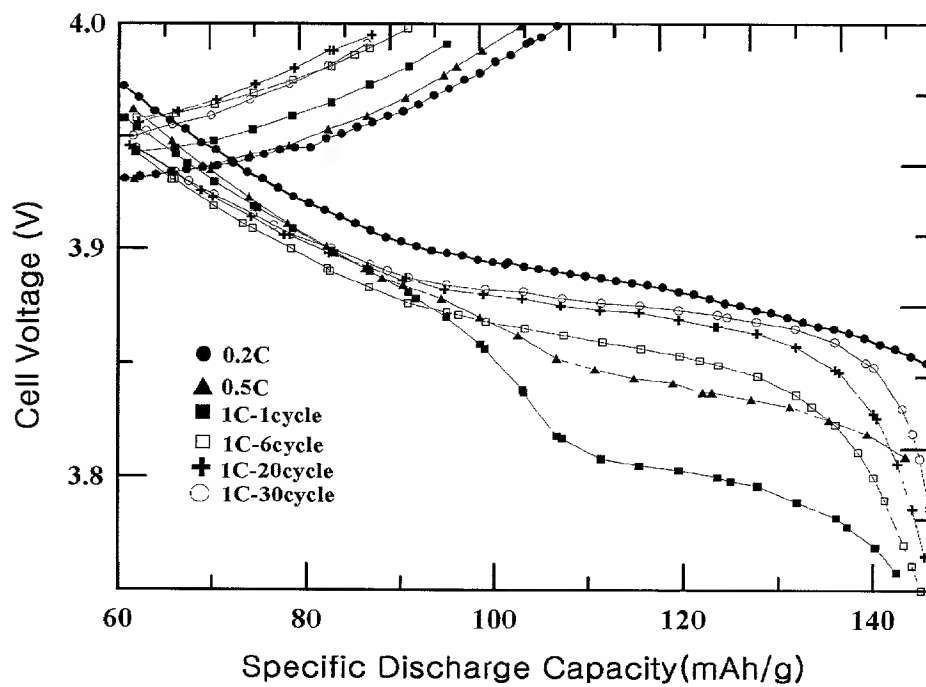
*FIG.2*



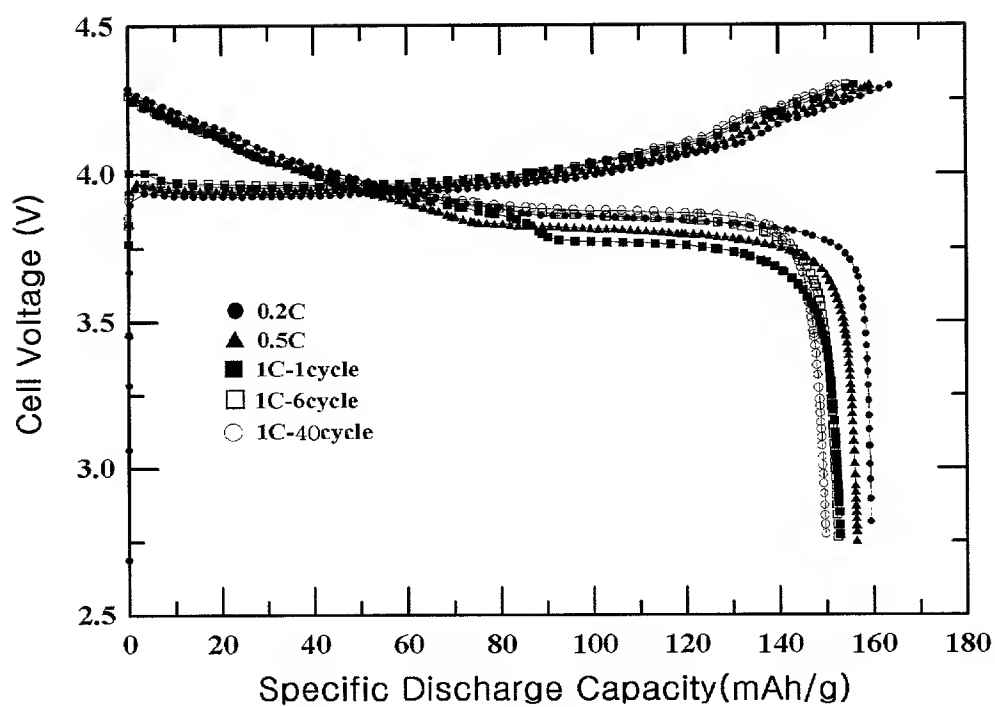
*FIG.3A*



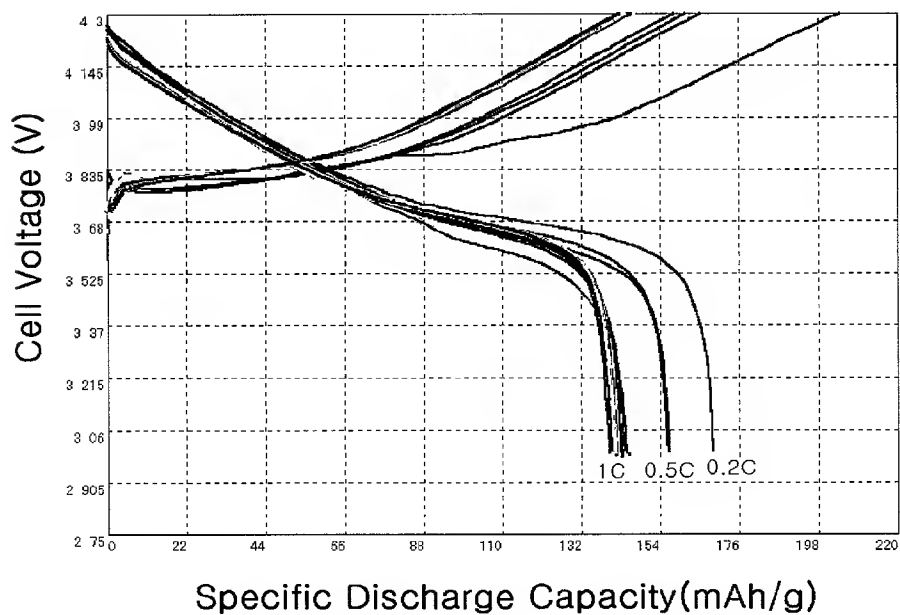
*FIG.3B*



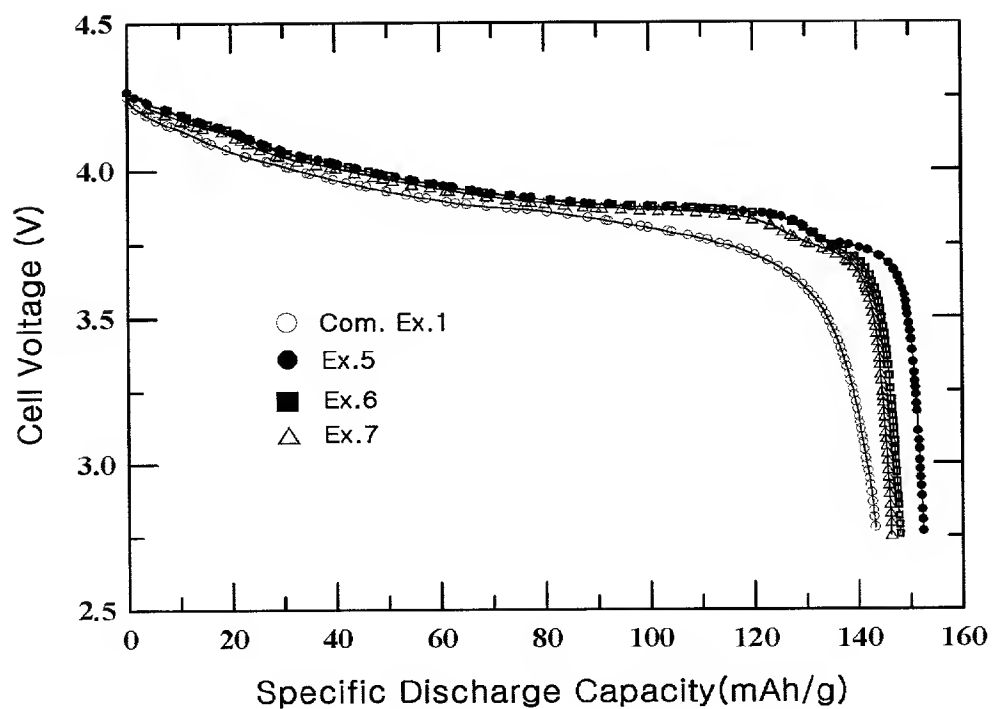
*FIG.4*



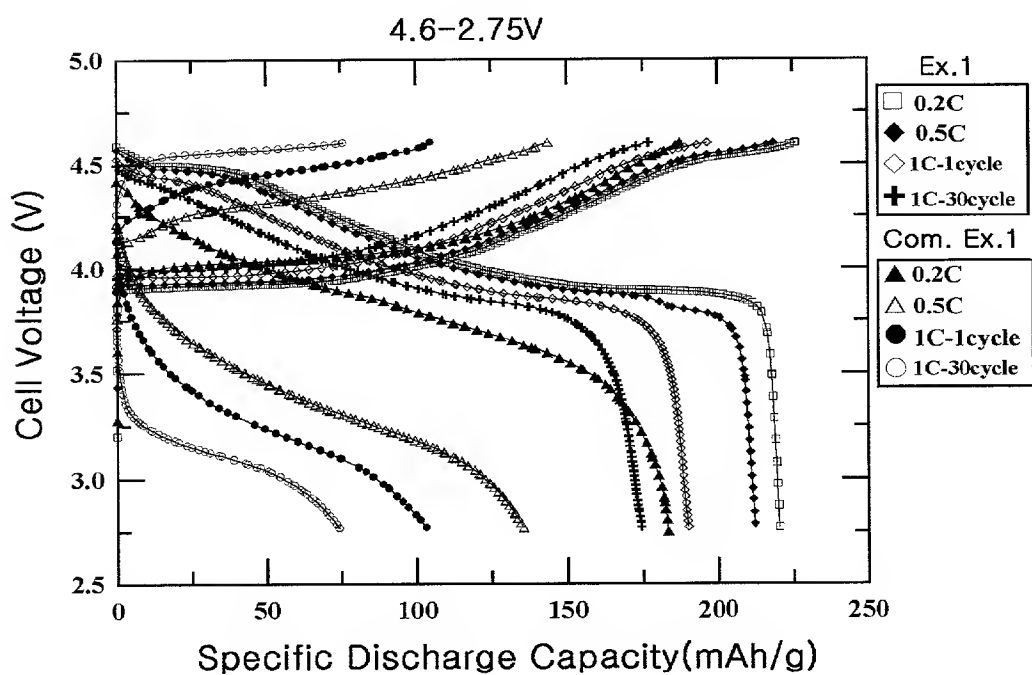
*FIG.5*



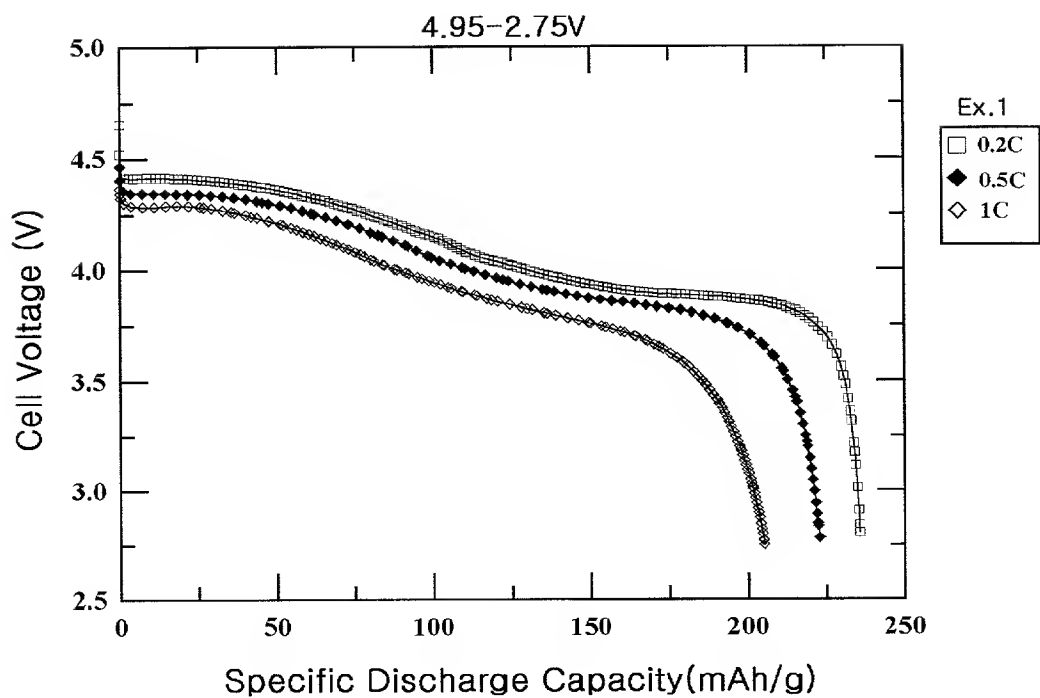
**FIG.6**



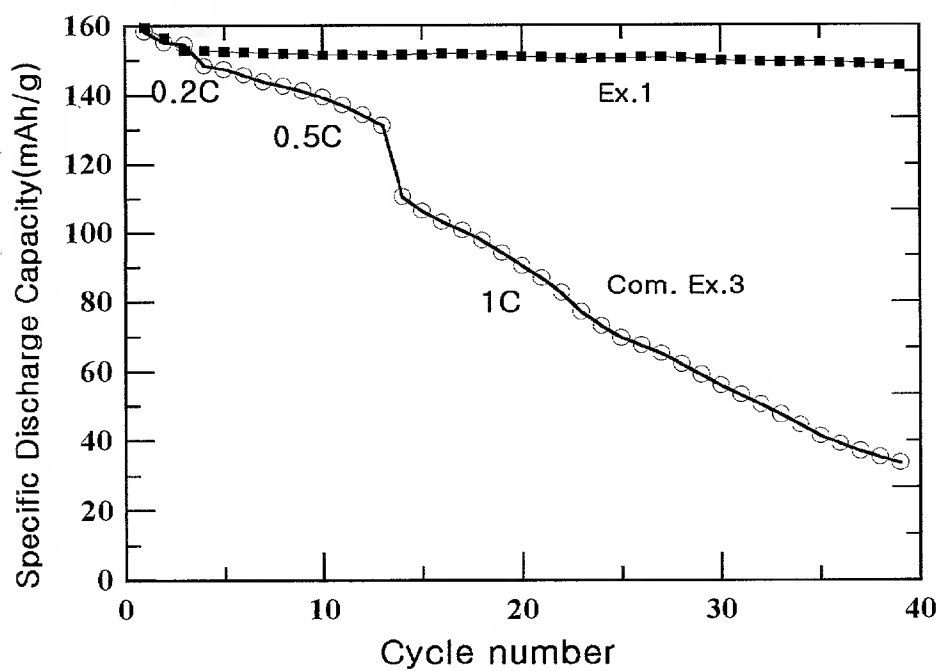
**FIG.7**



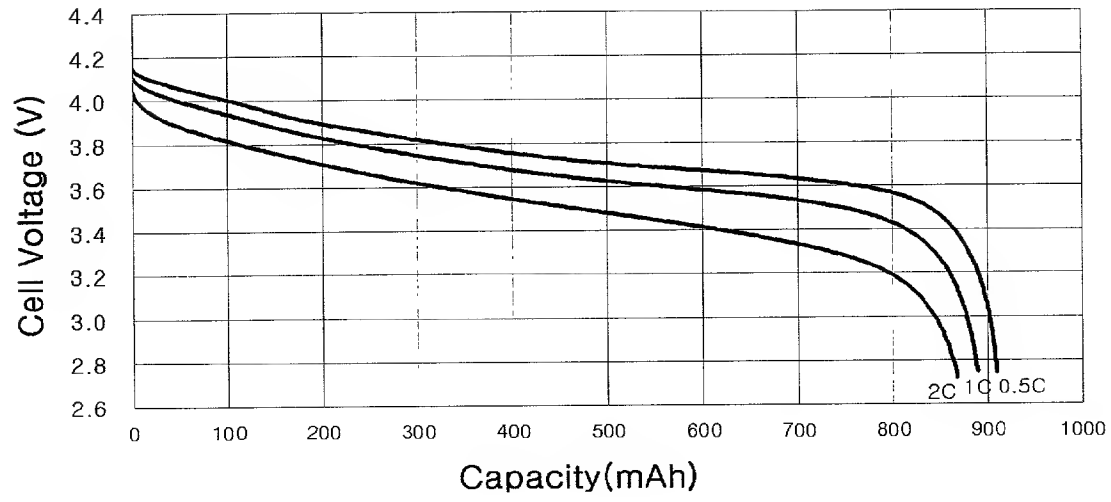
*FIG.8*



*FIG.9*



*FIG.10*



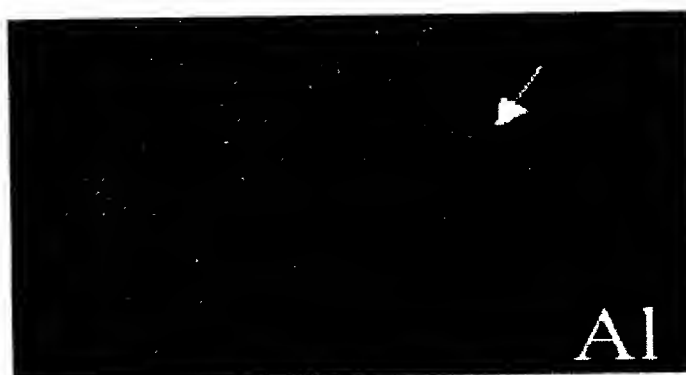
*FIG.11A*



*FIG.11B*



*FIG.11C*



*FIG.11D*



*FIG.11E*





**FIG.12**

Depth (Å)	O	Al	P	Co (at.%)	
0	74.57	5.91	4.75	14.77	→ Solid-solution compound of surface -treatment layer
24.2	74.69	4.6	4.61	16.1	
37.6	74.05	3.8	3.23	18.92	
75.2	74.69	2.35	3	24.96	
112.8	74.59	1.01	1.05	28.35	
150.4	74.85	0.95	0.65	28.55	
188	72.35	0.32	0.23	27.1	→ CoO <sub>2</sub>
225.6	72.89	0.03	0.05	27.03	
263.2	65.59	0.01	0	33.76	
300.8	65.71	0.01	0	34.49	
338.4	65.23	0.01	0	35.35	
376	65.16	0.01	0	35.5	

FIG.13A

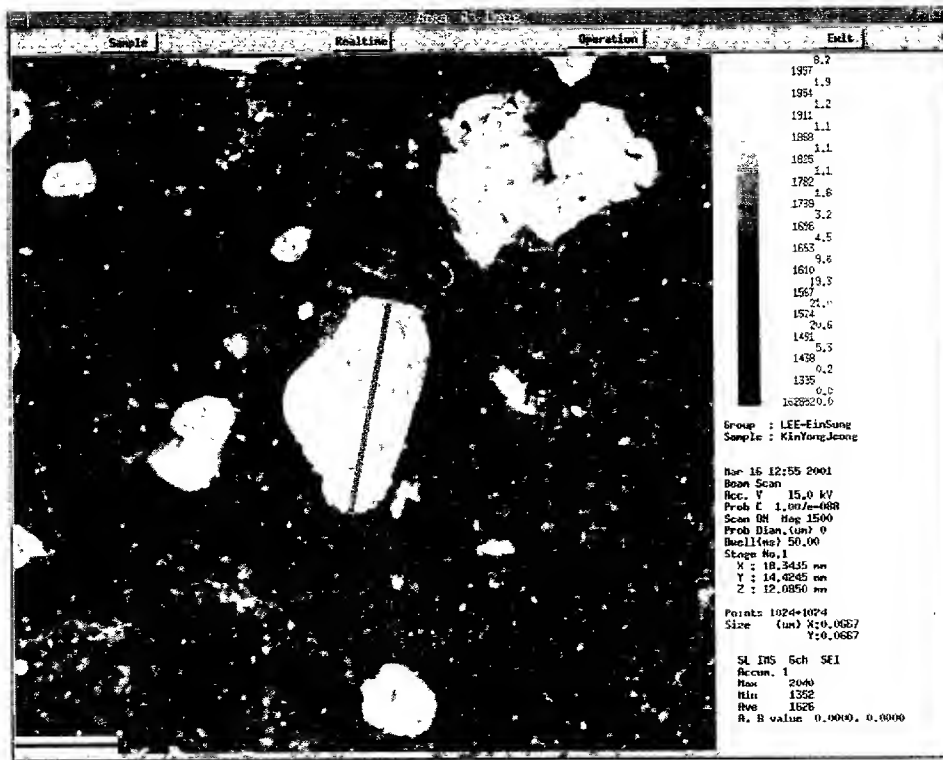
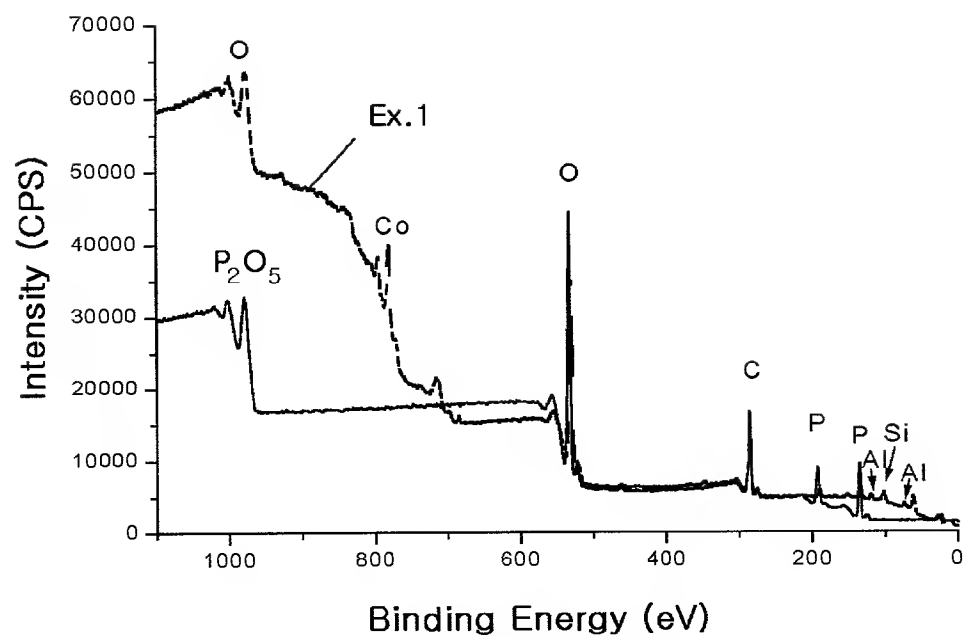


FIG.13B

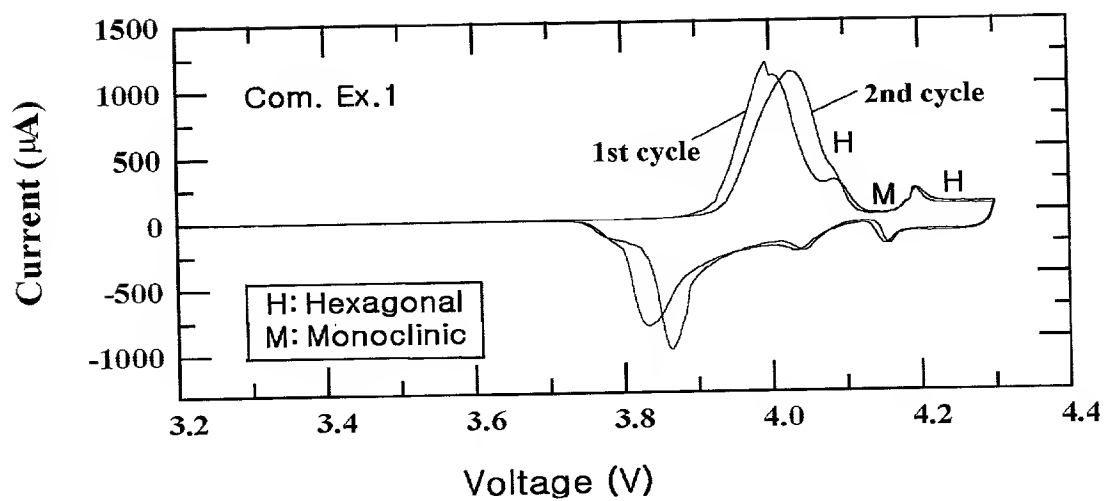
Depth (μm)	Co	P	Al
0	50.98	24.41	24.60
1	99.88	0.07	0.05
2	100	0	0
3	100	0	0
4	100	0	0
5	100	0	0
6	100	0	0
7	100	0	0
8	99.96	0.02	0.02
9	69.38	15.03	15.58

→ Al and P are not detected

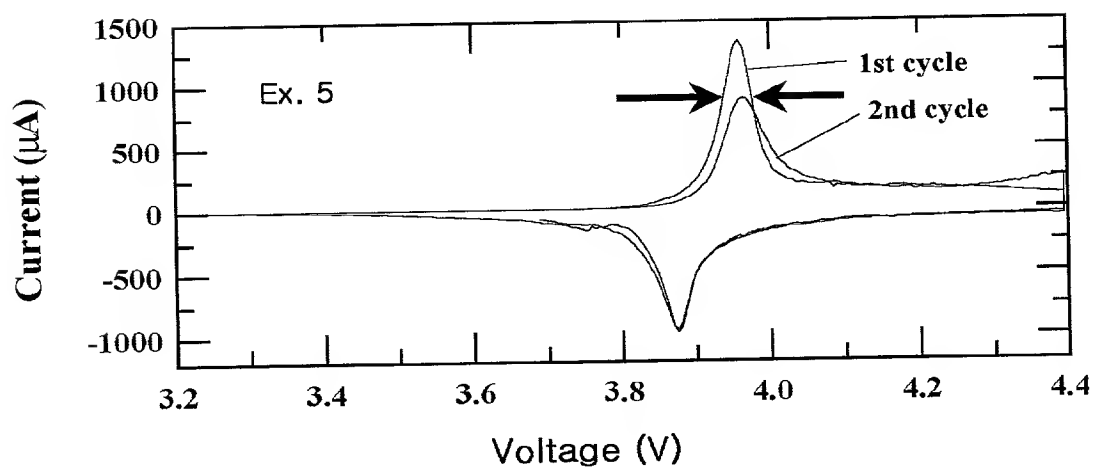
*FIG.14*



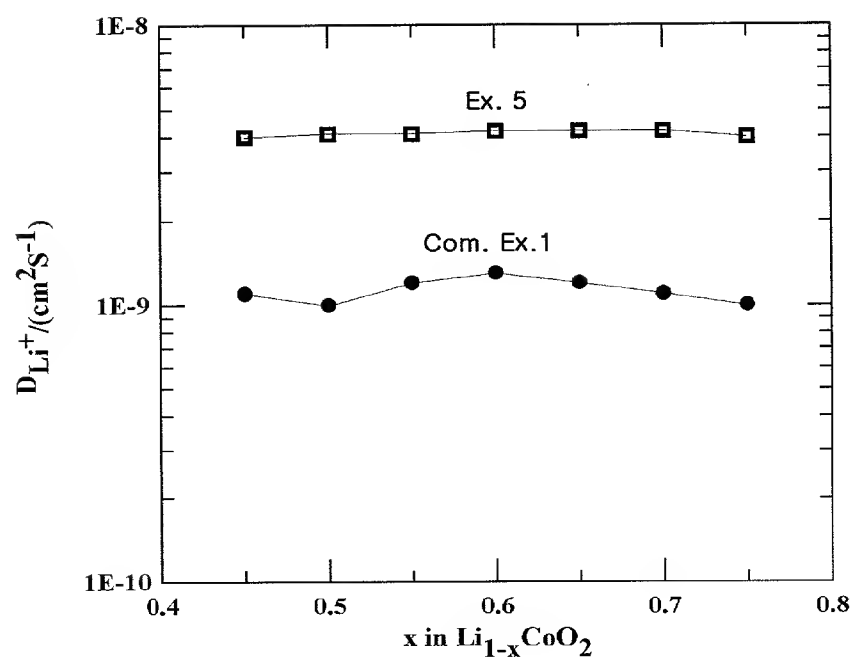
*FIG.15A*



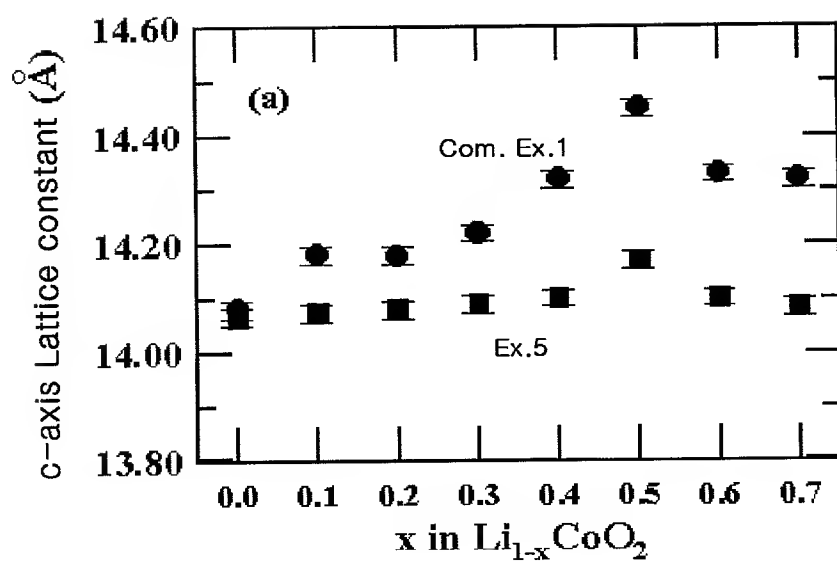
*FIG.15B*



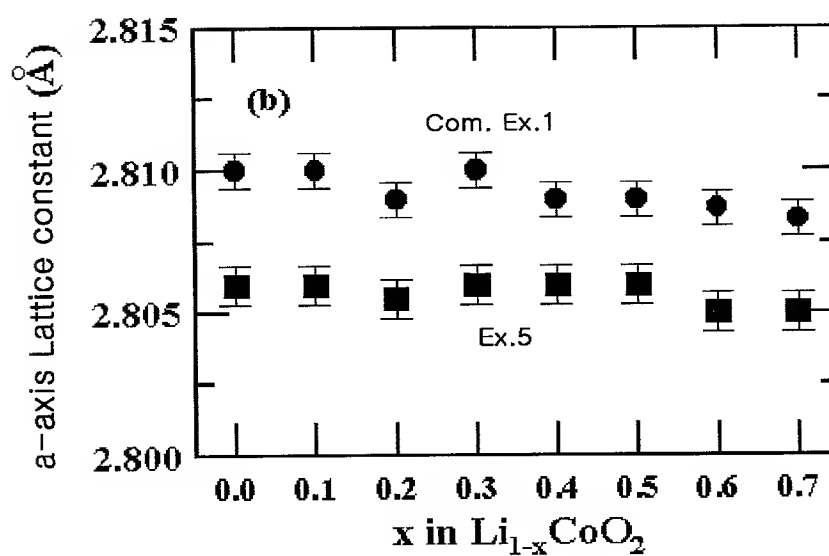
*FIG.16*



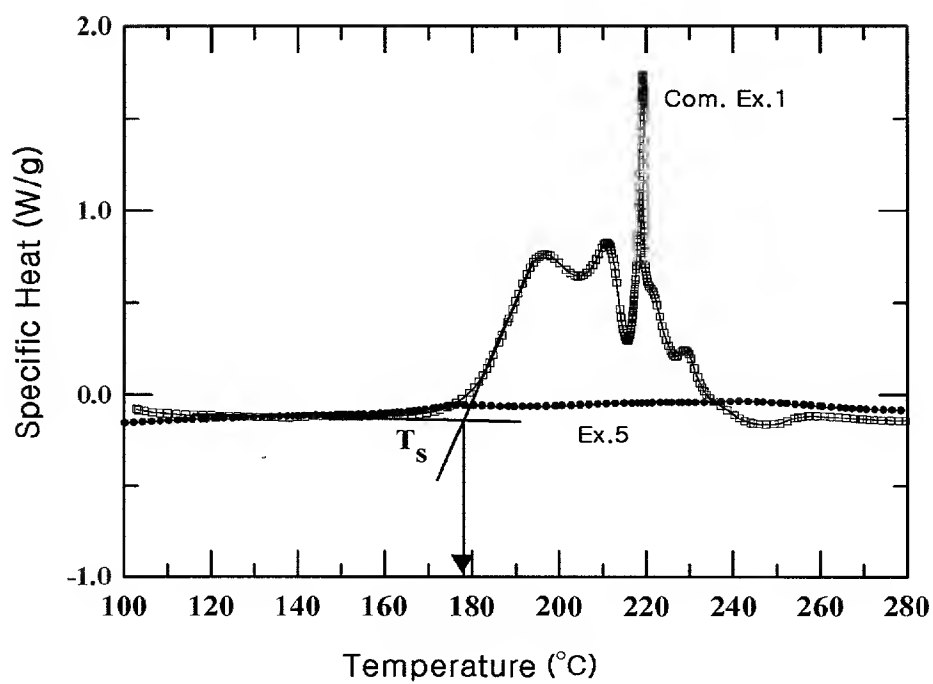
*FIG.17A*



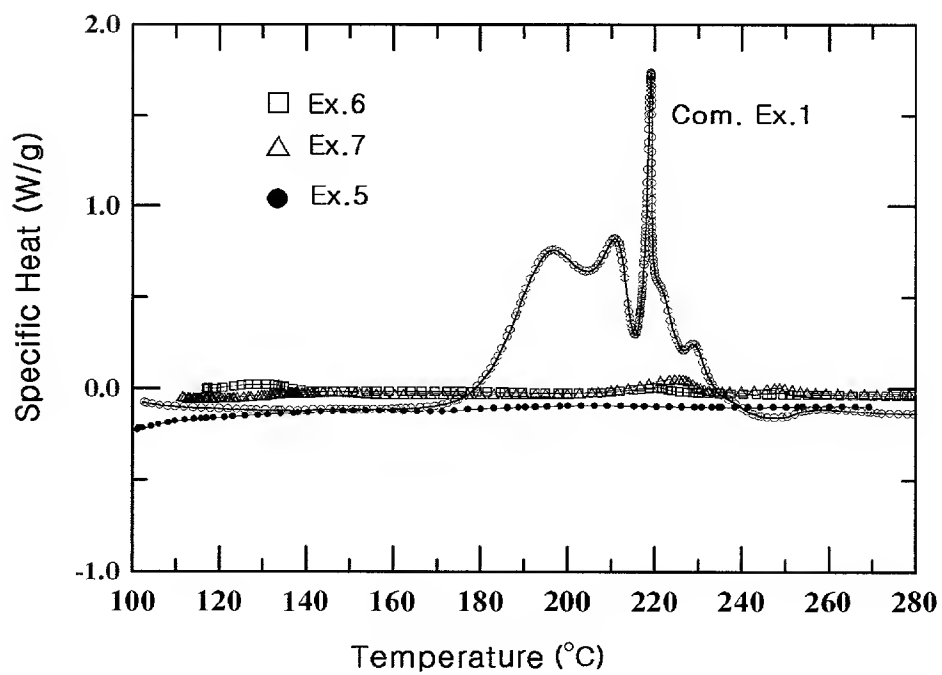
*FIG.17B*



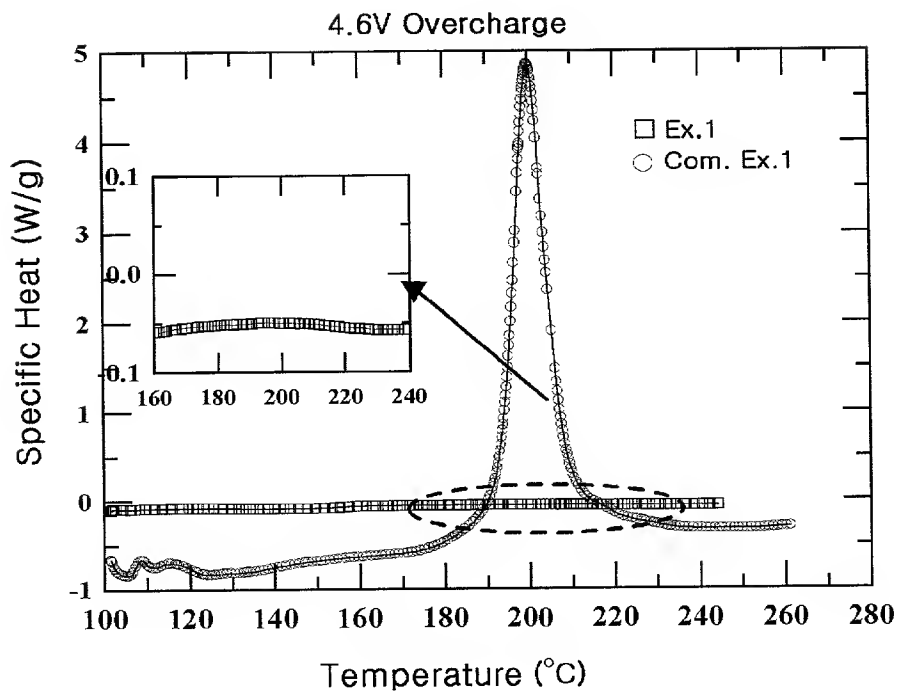
*FIG.18*



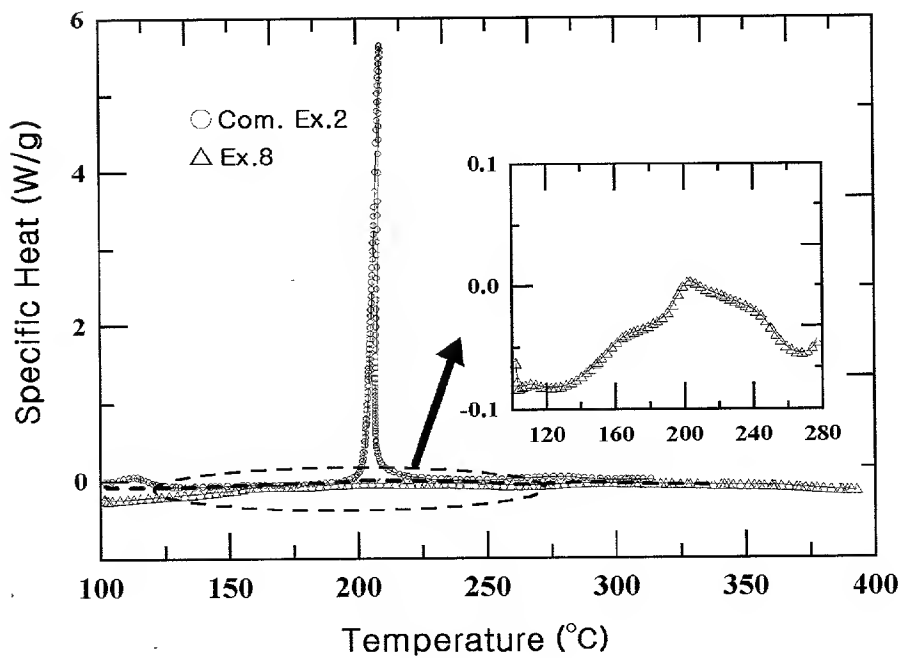
*FIG.19*



**FIG.20**

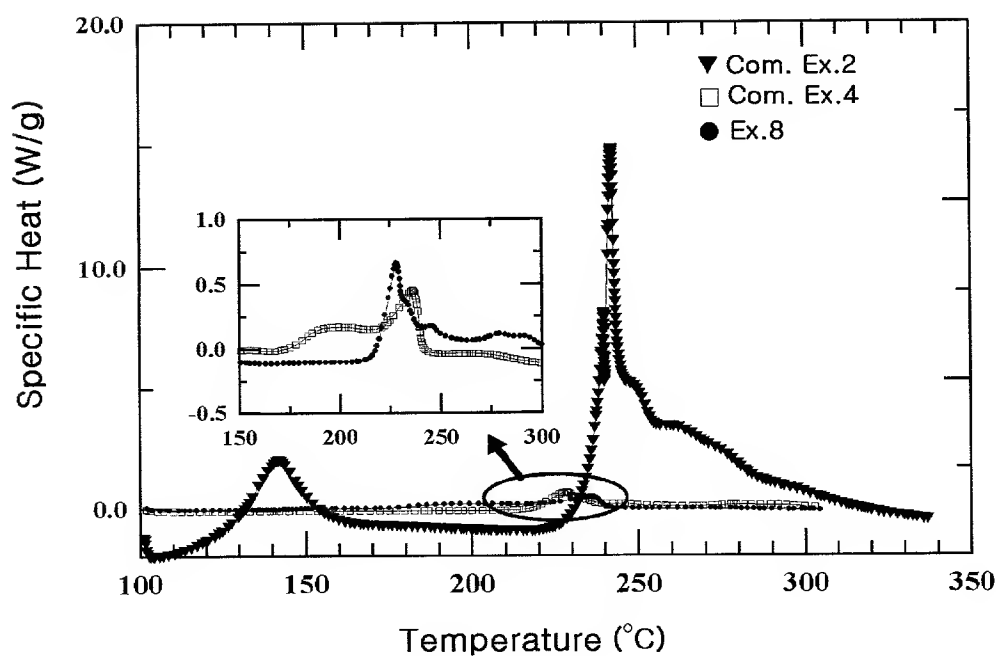


**FIG.21**

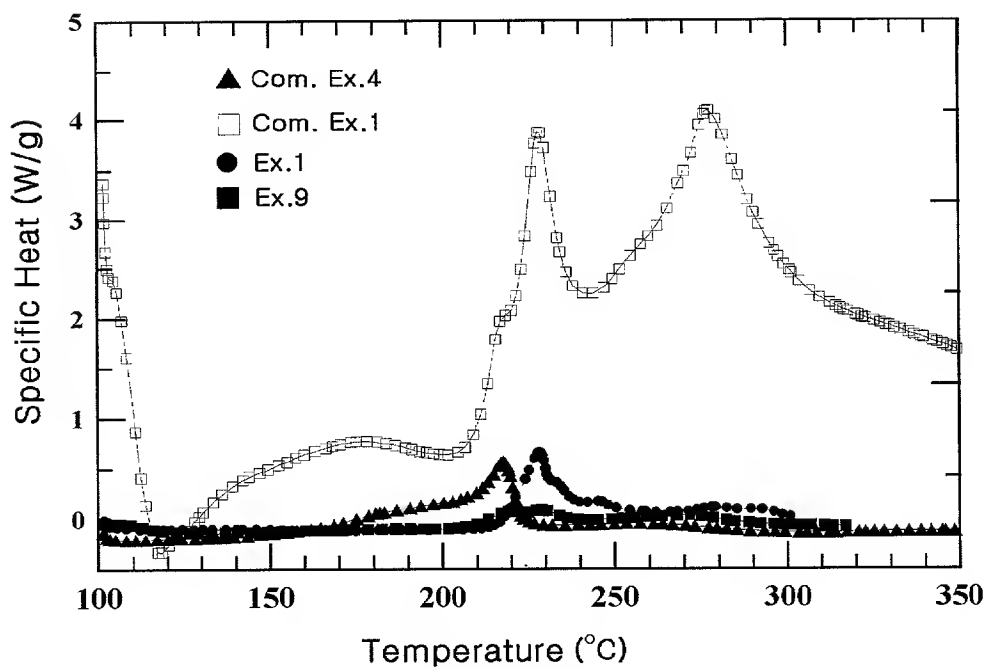




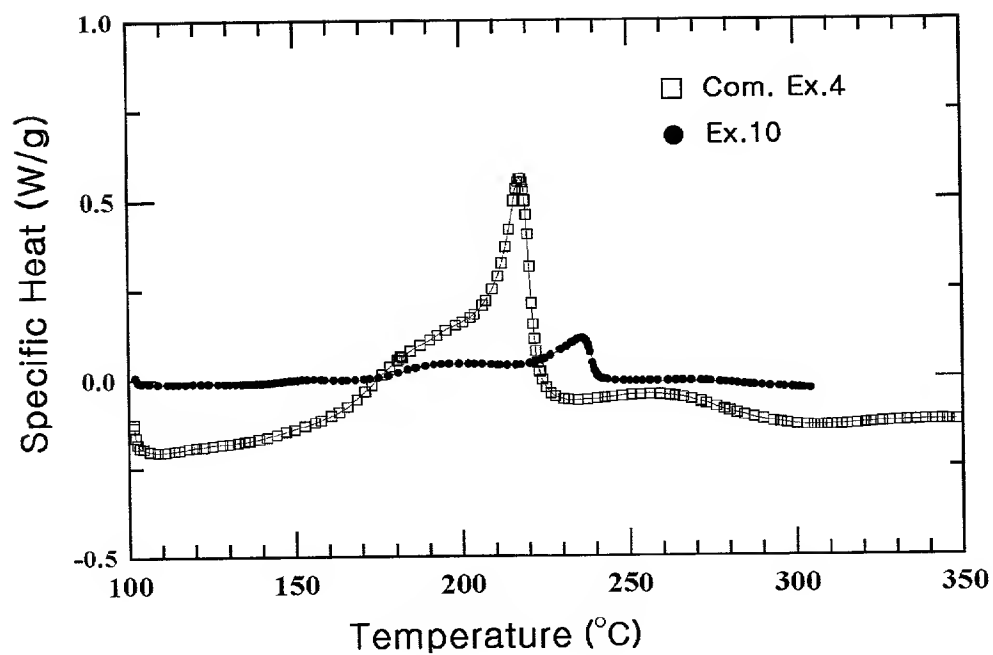
*FIG.22*



*FIG.23*

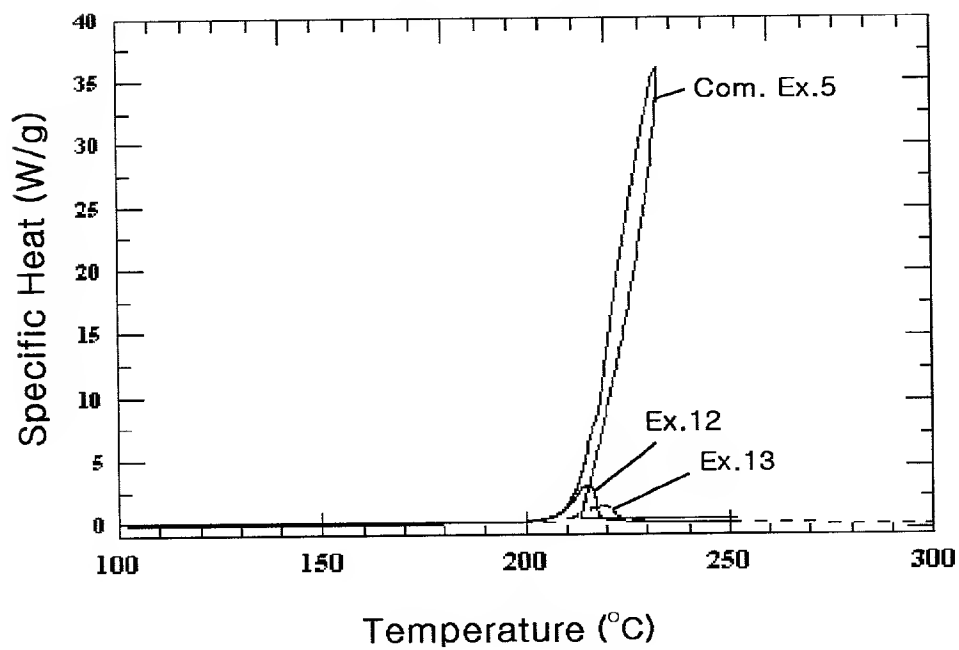


*FIG.24*



*FIG.25*

4.6V Overcharge



*FIG.26*

